

**Notice of Allowability**

Application No.  
10/584,932  
Examiner *DJP 12/17/07*  
Daniel J. Petkovsek

Applicant(s)  
HIROOKA ET AL.  
Art Unit  
2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to pre-amendment filed July 5, 2006.

2.  The allowed claim(s) is/are 1-16, 19 and 20.

3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 7/5/06
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

### **DETAILED ACTION**

This office action is in response to the pre-amendment filed with the application on July 5, 2006. In accordance with the pre-amendment, claims 1, 3-5, 7-10, and 12-15 have been amended; claims 17 and 18 have been canceled; while new claims 19 and 20 have been added.

Claims 1-16, 19, and 20 are pending.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

2. The prior art documents submitted by Applicant in the Information Disclosure Statements filed on July 5, 2006, have been considered and made of record (note attached copy of forms PTO-1449).

#### ***Drawings***

3. The drawings were received on July 5, 2006. These drawings are acknowledged.

#### ***Allowable Subject Matter***

4. Claims 1-16, 19, and 20 are allowed. The following is an examiner's statement of reasons for allowance: the closest prior art of record (Mouradian et al NPL; Morioka Toshio et al. JP 05-265057) does not teach or reasonably suggest an apparatus (or method for using same) in which an optical Fourier transformation technique is used in which an optical Kerr medium has a control light pulse with a shape expressed by a

*quadratic function or parabola* in order to subject the input source light pulse to linear chirping (independent claims 1 and 15; dependent claims 2-4, 8, 9, 12-14, 16, and 19). Further, the closest prior art of record does not teach or reasonably suggest an apparatus in which an optical Fourier transformation technique is used where a generator to generate *quadratic function type* optical pulses, which is equipped with dispersion reducing fibers for reducing the absolute value of the normal dispersion in the longitudinal direction, being used to generate the control light pulses being introduced into the optical Kerr medium (independent claims 5 and 10; dependent claims 6, 7, 11, and 20).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: PTO-892 form references A and B.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Petkovsek whose telephone number is (571) 272-4174. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Daniel Petkovsek  
December 17, 2007

/Tina Wong/  
Tina M. Wong  
Primary Examiner  
Art Unit 2874